

## CLAIMS

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1. A method for the production of an enzyme of interest, on an industrial scale, comprising

- 10 a) fermentation of a microbial strain producing an enzyme of interest in a fermentation medium comprising one or more partially prehydrolysed complex N-sources, wherein said partially prehydrolysed N-sources are sterilised separately from any other source containing carbohydrates, the prehydrolysis being achieved by addition of an acid and/or a hydrolytic enzyme; and
- b) recovering the enzyme of interest from the fermentation broth.

- 15 2. The method according to claim 1, wherein the enzyme of interest is selected from the group consisting of an amylase, a cellulase, a lipase, an oxidoreductase, a carbohydrase, and a non-destructive protease or peptidase.

3. The method according to claim 1, wherein the enzyme is a self-destructive protease
- 20 or peptidase.

4. The method according to claim 1, wherein the microbial strain is a bacterium or a fungus.

- 25 5. The method according to claim 4, wherein the bacterium is a *Bacillus* strain.

6. The method according to claim 1, wherein the complex N-sources are proteins of plant origin containing less than 10% of carbohydrate.

- 30 7. The method according to claim 1, wherein the complex N-sources are selected from the group consisting of potato protein and pea protein.

8. The method according to claim 1, wherein the complex N-sources are proteins of animal origin containing less than 10 % of carbohydrate.

5 9. The method according to claim 1, wherein the complex N-sources are selected from the group consisting of blood proteins, fish muscle proteins and animal muscle proteins.

10. The method according to claim 2, wherein the prehydrolysis results in a breakage of between 10 and 70% of the peptide bonds.

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11. The method according to claim 3, wherein the prehydrolysis results in a breakage of between 1 and 20% of the peptide bonds.

12. The method according to claim 1, wherein the amount of prehydrolysed complex N-  
15 sources is added in an amount of at least 5 % (w/w) of the total amount of N-Kjeldahl added to the fermentation medium.

13. The method according to claim 1, wherein the fermentation medium is of at least 50 litres.

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14. The method according to claim 1, wherein the fermentation occurs via a repeated batch, a fed batch, a repeated fed batch or a continuous process.